UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG ____ ELECTRIC LOGS ____ FILE X WATER SANDS ____ LOCATION INSPE ____ SUB. REPORT/abd. ____

9903/9 LA'D eff 3/12/99'

DATE FILED DECEMBER 18, 1997

LAND: FEE & PATENTED STATE LEASE NO. PUBLIC LEASE NO. ML-46290 INDIAN

DRILLING APPROVED: FEBRUARY 3, 1998

SPUDDED IN:

COMPLETED: PUT TO PRODUCING:

INITIAL PRODUCTION:

GRAVITY A.P.I.

GOR:

PRODUCING ZONES:

TOTAL DEPTH:

WELL ELEVATION:

DATE ABANDONED: 3-12-99 LA'D

FIELD:

UNIT:

COUNTY: UINTAH COUNTY

WELL NO. GUSHER STATE 4-16 API NO. 43-047-33036

LOCATION 698 FNL FT. FROM (N) (S) LINE. 859 FWL FT. FROM (E) (W) LINE. NW NW 1/4 — 1/4 SEC.

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
				6 S	20E	16	SNYDER OIL CORPORATION

FORM 3

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

5. Lease Designation and Serial Number: ML - 46290

6. If Indian, Allottee or Tribe Name: n/a

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1A. Type of Work: DRILL [X] DEEPEN [ ]

7. Unit Agreement Name: n/a

1B. Type of Well: OIL [X] GAS [ ] OTHER: SINGLE ZONE [ ] MULTIPLE ZONE [ ]

8. Farm or Lease Name: Gusher State

2. Name of Operator: **Snyder Oil Corporation** **Attn: Joe Mazotti**

9. Well Number: 4 - 16

3. Address and Telephone Number: **1625 Broadway, Suite 2200, Denver, CO 80202** **303-592-4643**

10. Field and Pool, or Wildcat: East Gusher

4. Location of Well (Footage):

At Surface: 698' FNL, 859' FWL

At Proposed Producing Zone:

11. Qtr/Qtr, Section, Township, Range, Meridian: NW/NW, Sec. 16, T6S - R20E

14. Distance in miles and direction from nearest town or post office: 17.0 miles southwest of Vernal, Utah

12. County: Uintah

13. State: UTAH

15. Distance to nearest property or lease line (feet): 698'

16. Number of acres in lease: 640

17. Number of acres assigned to this well: 40

18. Distance to nearest well, drilling, completed, or applied for, on this lease (feet): n/a

19. Proposed Depth: 8475'

20. Rotary or cable tools: Rotary

21. Elevations (show whether DF, RT, GR, etc.): 5108' GR

22. Approximate date work will start: January 30, 1998

23. **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8", J-55	24#	850'	615 sx Class G
7-7/8"	5-1/2", J-55	15.5#	8475'	200 sx Class G PLC + 130 sx Class G

DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

See Attached Exhibits:

Exhibits A,B,C,D,E,F
BOPE Diagram
10 point Drilling Plan
Surface Use Plan

Lease Description:
T6S - R20E: Sec. 16: ALL

Surface Owner: State of Utah

RECEIVED
DEC 18 1997
DIV. OF OIL, GAS & MINING

24.

Name & Signature: Joe Mazotti Title: Sr. Regulatory Specialist Date: 12/15/97

(This space for State use only)

API Number Assigned: 43-047-33036

Approval:

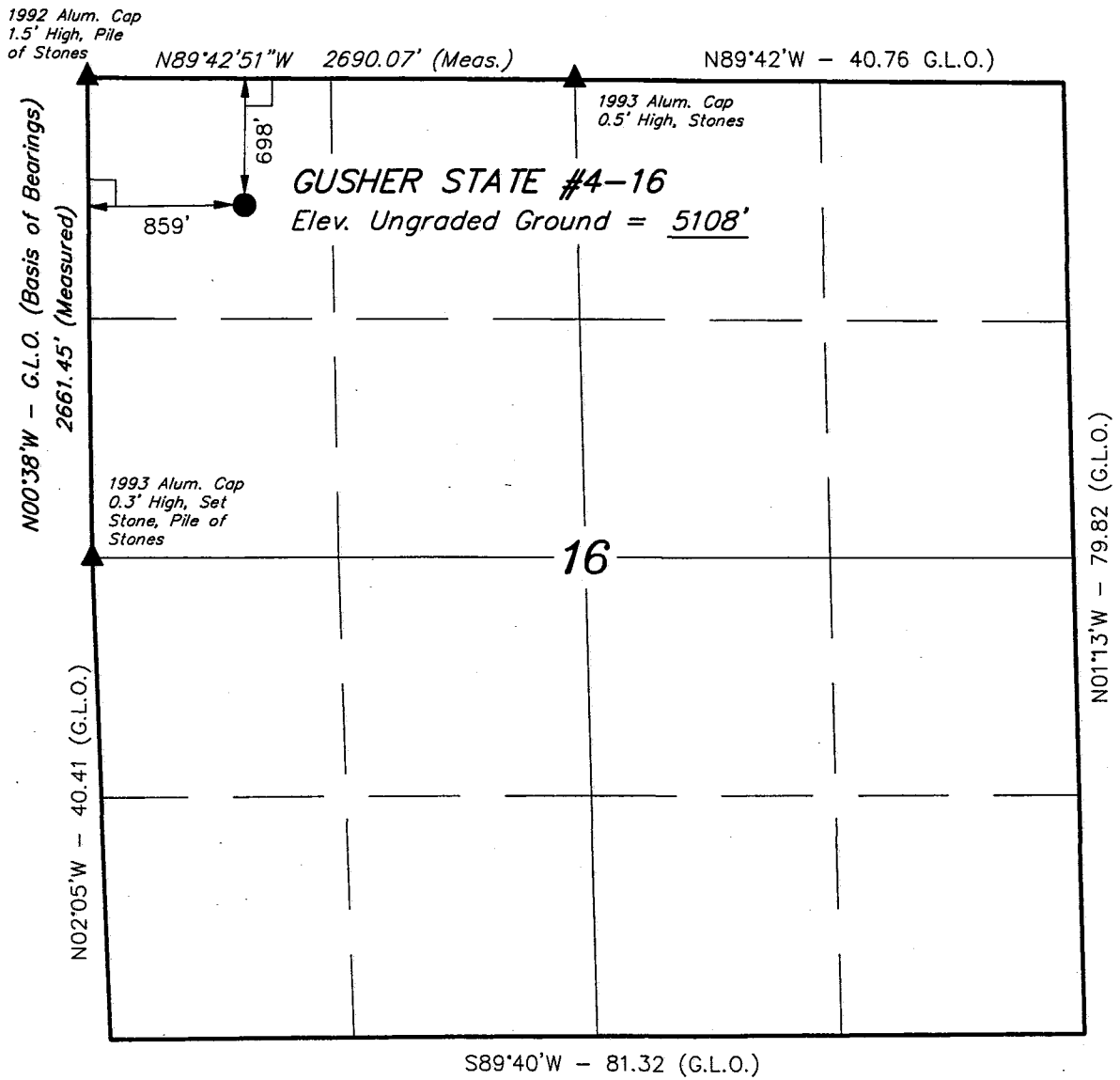
APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 2/3/98
BY: John R. Baza

(1/93) (See Instructions on Reverse Side)

SNYDER OIL CORP.

Well location, GUSHER STATE #4-16, located as shown in the NW 1/4 NW 1/4 of Section 16, T6S, R20E, S.L.B.&M. Uintah County, Utah.

T6S, R20E, S.L.B.&M.

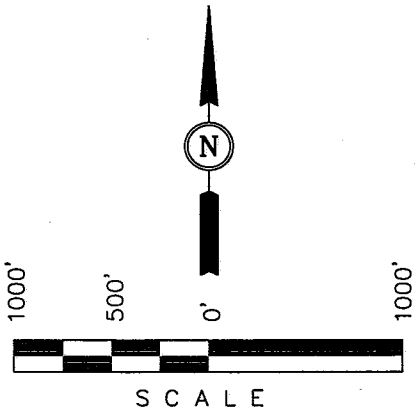


LEGEND:

- = 90° SYMBOL
- ● = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

BASIS OF ELEVATION

SPOT ELEVATION AT THE NORTHWEST CORNER OF SECTION 16, T6S, R20E, S.L.B.&M. TAKEN FROM THE VERNAL SW, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5060 FEET.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(435) 789-1017

SCALE	DATE SURVEYED:	DATE DRAWN:
1" = 1000'	11-08-97	11-11-97
PARTY: B.B. D.R. D.R.B.	REFERENCES: G.L.O. PLAT	
WEATHER: COOL	FILE: SNYDER OIL CORP.	

DIVISION OF OIL, GAS AND MINING
APPLICATION FOR PERMIT TO DRILL
STATEMENT OF BASIS

Operator Name: SNYDER OIL CORPORATION .
Name & Number: GUSHER STATE 4-16
API Number: 43-047-33036
Location: 1/4,1/4 NW/NW Sec. 16 T. 6S R. 20E

Geology/Ground Water:

According to tech. Pub. 92 the base of moderately saline water is at a depth of approximately 6000 feet in this area. High quality ground water may be encountered in sands throughout the Uinta. The proposed casing program calls for surface casing at 850 feet, cemented to surface. A production casing will be set at total depth and cemented with the lead cement top above the top of the Green River Formation at approximately 4800 feet. The tail cement will place cement well above all producing intervals. This program will adequately protect and isolate any water zones encountered and will also protect and isolate the producuing zones.

Reviewer: D. Jarvis

Date: 1-12-98

Surface:

THE PRE-SITE INVESTIGATION OF THE SURFACE WAS PERFORMED BY FIELD PERSONNEL ON 1/7/98. ED BONNER WITH STATE TRUST LANDS AND JACK LYTLE WITH THE DIVISION OF WILDLIFE RESOURCES WERE NOTIFIED OF THIS PRE-SITE INVESTIGATION ON 12/31/97 NEITHER CHOSE TO ATTEND. A LINER WILL NOT BE REQUIRED FOR THE RESERVE PIT. 100' SOUTHWEST OF PROPOSED WELL IS AN DRY HOLE MARKER WITH "POINT STATE 4-16 ML22039" WELDED ON POST.

Reviewer: DAVID W. HACKFORD

Date: 1/9/98

Conditions of Approval/Application for Permit to Drill:
1.....RESERVE PIT SHALL BE CONSTRUCTED EAST OF WELL BORE.
2.....TOPSOIL SHALL BE REMOVED AND STOCKPILED ON SOUTH EDGE OF LOCATION.

SNYDER OIL CORPORATION
Gusher State 4-16
NWNW, Section 16, T6S-R20E
Uintah County, Utah
State of Utah Lease No. ML - 46290

DRILLING PLAN

1. Geologic name of surface formation: Uinta

2. The estimated tops of important geologic markers:

Formation	Depth(ft)	Hydrocarbon Bearing	Mineral Bearing Zones
Uinta	Surface	Yes	
Green River	4825' (+290)	Yes	
Douglas Creek	7810' (-2695)	Yes	
K-1	7875' (-2760)	Yes	
K-2	7985' (-2870)	Yes	
K-3	8130' (-3015)	Yes	
K-4	8275' (-3160)	Yes	
TD	8475' (-3360)		

3. Anticipated BHP: 3150 psi
Anticipated Fracture Gradient: .80 psi/ft

All shows of fresh water and minerals will be reported and protected.

4. The proposed casing program, including the size, grade weight per foot and condition of each string:

Size	Top	Bottom	Weight	Grade	Thread	Cond.
8-5/8"	0	850'	24#	J-55	STC	New
5-1/2"	0	TD	15.5#	J-55	LTC	New

Surface casing shall be pressure tested to .22 psi/ft of total depth or 1500 psi, which ever is greater but not to exceed 70% minimum internal yield. Production casing will be tested to 3500 psi at surface.

CEMENT:

Approximate Volumes / Grades / Yields:

Surface String:

Cement will be circulated to surface; estimated volume (180% of theoretical value): 615 sxs Class G with 2% CaCl2 @ 15.8 ppg (1.14 ft^3/sx yield).

Production String:

Top of the lead cement will be 4300' below surface to cover at least 500' above the top of the Green River formation (estimated to be 4825' below surface). The base of moderately saline ground water is estimated to be 1000' below sea level or 6108' below surface, per State of Utah Dept of Natural Resources Technical Publication No. 92, "Base of Moderately Saline Ground Water in the Uinta Basin, Utah."

The top of the tail cement will be at least 200' above the top of the Douglas Creek member of the Green River formation (estimated to be 7810' below surface).

Estimated volume is guage hole + 30%.

Lead Cement: 220 sxs Class G Prem Lite Cement with 28% Poz and 10% Gel (11.0 ppg and 3.42 ft^3/sx yield).

Tail Cement: 130 sxs Class G with 10% Gypsum and 3% Salt (14.2 ppg and 1.63 ft^3/sx yield).

Actual volumes will be calculated and adjusted with caliper log and service company analysis prior to cementing. 10% excess will be pumped.

5. The minimum specifications for pressure control equipment which will be provided is included on the schematic diagram attached, showing size, pressure ratings testing procedures and testing frequency:

2000# BOP with 4-1/2" pipe rams
2000# BOP with blind rams

Manifold includes appropriate valves, positive and adjustable chokes, kill line and gas separator to control abnormal pressures. BOP's will be pressure tested to full working pressure at installation and will be functionally cycled on each trip. After a period of one month and each following, assuming drilling operations are continuing, the BOP's will be tested.

Accumulator will have 160 gallon capacity with backup system to be run on rig air or bottled nitrogen. The accumulator will be hydraulically driven with primary power of gas or electric motor. Primary controls will be located off the drilling floor at ground level with backup controls on the accumulator.

Safety valve and subs will fit all drill string connections in use. Visual mud monitoring will be conducted during operations.

6. The type and characteristics of the proposed circulating medium to be employed for controlling formation pressures during rotary drilling and the quantities and types of mud and weighing material to be maintained:

Top Int.	Bottom Int.	Type	Weight (ppg)	Visc	pH	Water Loss	Remarks
0	4825'	Air / Mist	NA	NA	NA	NA	Air drill to base of Uinta Fm.
4825'	TD	DAP-Wtr	8.4	27-35	8.5 - 9	NC	Min. Wt.

(NA - Not Applicable, NC - No Control)

Snyder Oil Corporation requests variances from the regulation/s requiring that:
a) The blooie line be straight, and that
b) A continuous igniter be on the blooie line as a mist system will be used.

Quantities of Mud material will be maintained on site to increase mud weight if abnormal pressures are encountered.

7. The auxiliary equipment to be used:

a) Upper and lower kelly cocks.
b) An inside BOP on the floor with proper connections to fit the drill pipe and collars.

8. The testing, logging and coring program to be followed:

Logs:	DIL/GR	TD to base surface casing
	Compensated Neutron Lithodensity;	TD to 500' above Douglas Creek
	Sonic;	TD to base surface casing (at operators discretion)

9. No anticipated abnormal pressures or temperatures expected to be encountered:

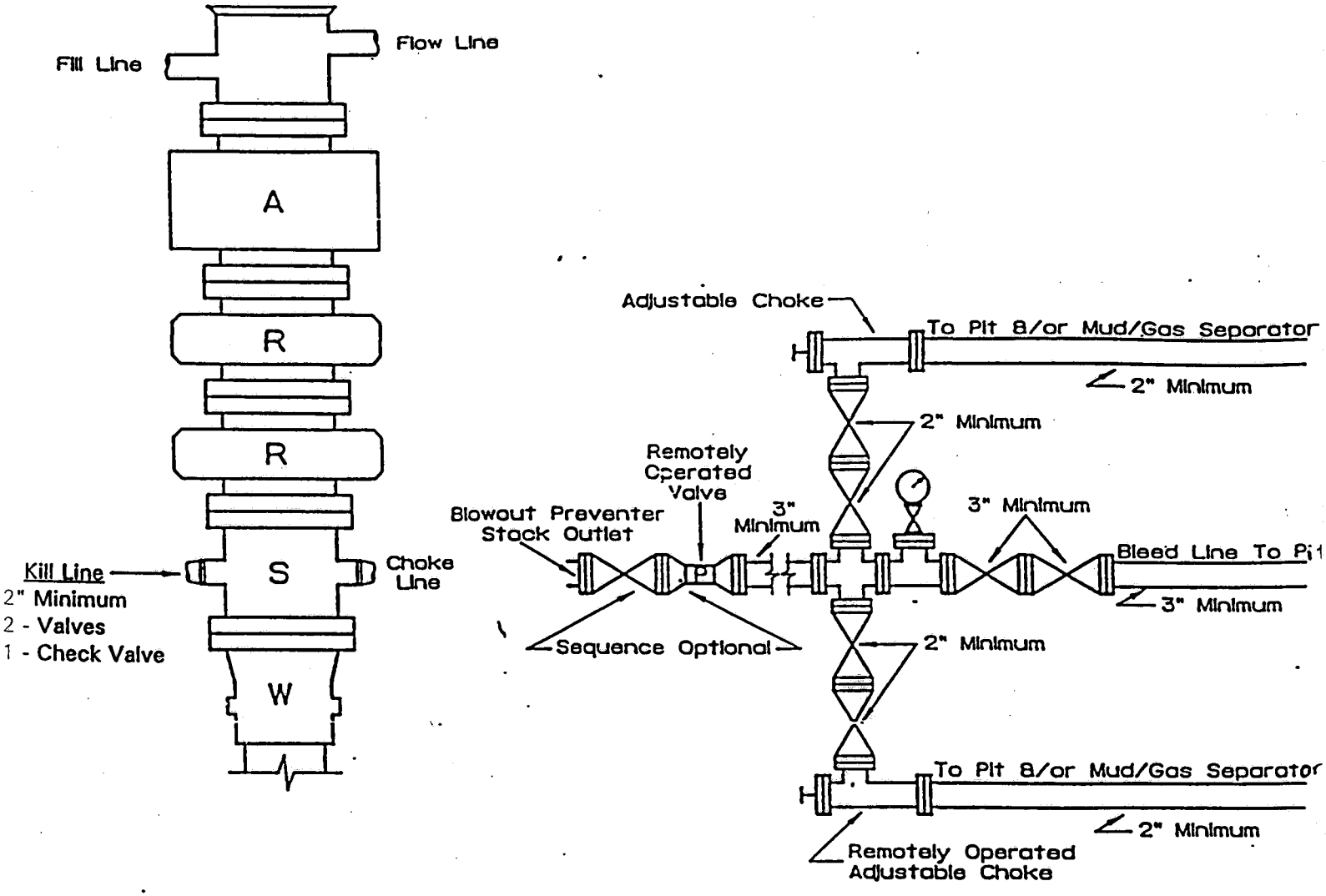
Anticipated bottom-hole pressures are approximately 0.38 psi/ft.
No hydrogen sulfide expected.

10. The anticipated starting date and duration of the operation:

Starting Date: January 30, 1998
Duration: 20 days

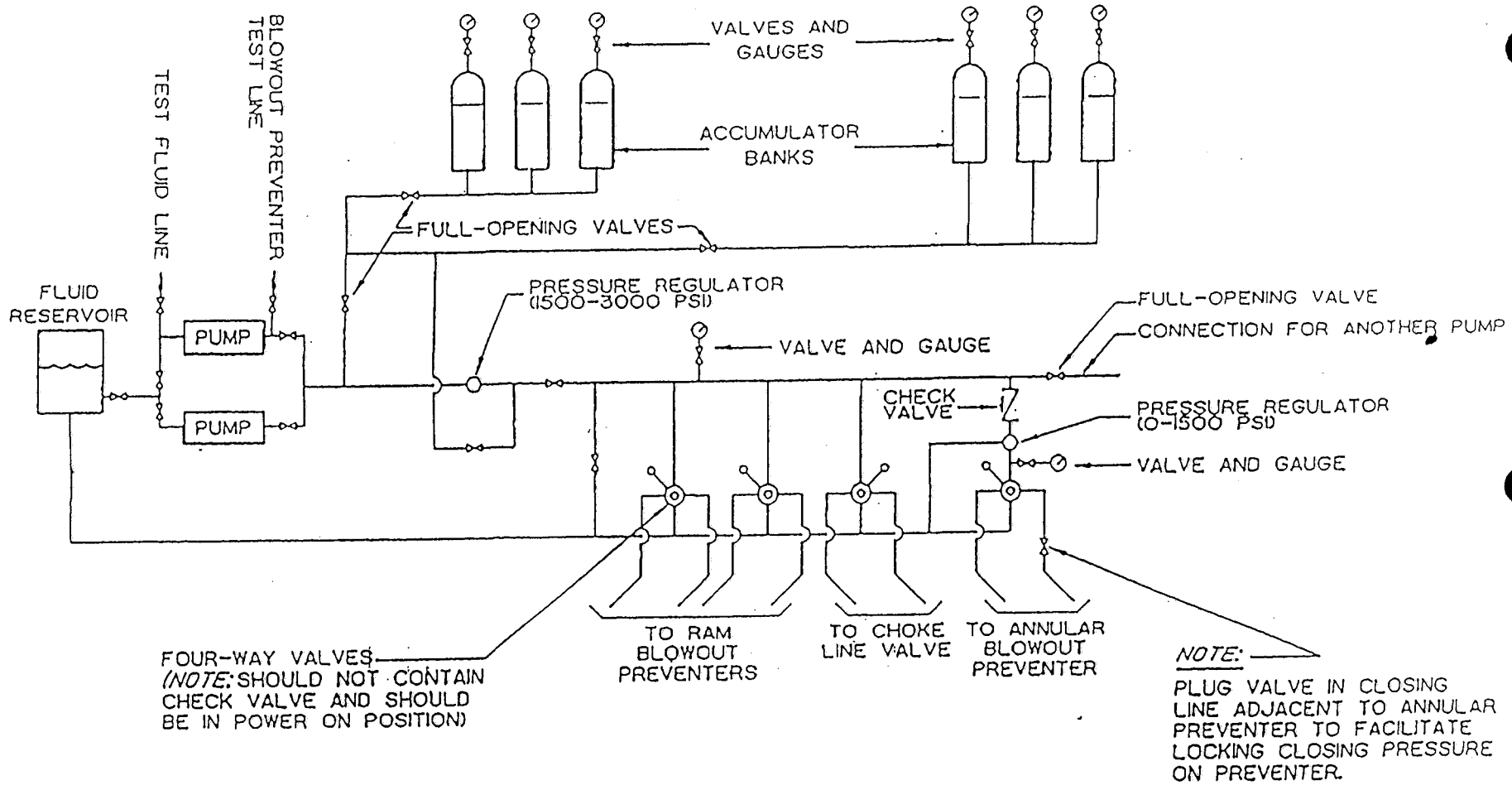
DOUBLE RAM TYPE PREVENTERS

(2000 psi System)



Minimum BOP Stack	2000	psi Working Pressure
Two Pipe Ram	2000	psi Working Pressure
One Blind Ram	2000	psi Working Pressure
One Annular	2000	psi Working Pressure
Well Head	2000	psi Working Pressure
Manifold	2000	psi Working Pressure

TYPICAL BLOWOUT PREVENTER CLOSING UNIT ARRANGEMENT



Surface Use Plan

Company: **Snyder Oil Corporation**
1625 Broadway, Suite 2200
Denver, Colorado 80202
Attn: Joe Mazotti
303-592-4643

Well Name: **Gusher State 4-16**
Location: NW/NW, Sec. 16, T6S - R20E
Uintah County, Utah
Lease: ML - 46290

1. Existing Roads

A. The existing access road extends 1.0 miles northest of Utah State Highway 209, 17.0 miles southwest of Vernal, Utah (see Exhibits A&B).

B. The existing roads will be maintained is as good or better condition than now exists, meeting standards listed in BLM Manual Section 9113 for a resource road.

C. If the access road is dry during construction, drilling, and completion activities water the access road to help road compaction and minimize soil loss due to blowing dust.

2. Access Roads to be Constructed

A. The new road will be completed as a single lane 16 foot subgrade road with no turnouts. (See Exhibit B)

B. Construct the access road and associated drainage structures in accordance with BLM roading guidelines as stated in the BLM/USFS publication: Surface Standards for Oil and Gas Exploration and Development, Third Edition, January 1989.

C. If the access road is dry during construction, drilling, and completion activities water the access road to help road compaction and minimize soil loss due to blowing dust.

D. Road construction is to be monitored by a qualified individual agreed to by the authorized officer and the operator. Compaction of the subgrade with water and heavy equipment to a density higher than the surrounding subsurface is required during construction.

E. Cattleguard: No cattleguard will be required.

F. Maintenance:

Operator shall regularly maintain the road in a safe, usable condition. A regular maintenance program shall include, but not be limited to, blading, ditching, culvert installation, drainage installation, surfacing, and cattleguards, as needed. Design, construction, and maintenance of the road will be in compliance with the standards contained in BLM Manual, Section 9113 (Roads), and in the "Gold Book", Oil and Gas Surface Operating Standards for Oil and Gas Exploration and Development, Third Edition.

3. Location of existing wells: See Exhibit C

4. Location of Existing and/or Proposed Production Facilities

A. Existing facilities: See Exhibit C

B. New production facilities well be utilized:
Pumping Unit
Treater
Gas to be vented
400 bbl Oil Tank
400 bbl Water Tank
55 Gallon Ethylene Glycol tank
Pumping Unit
Lines are to be 3" schedule 80 welded flowline in insulated bundle with 2 - 1.5" Glycol heat trace lines and a 1" fuel line.

C. Facilities are limited to existing drilling pad (Exhibit D).

D. Containment berms will be installed to the following minimums: 18" wide on top, 36" wide at the base, and 24" tall. Width and length of berm will be sufficient to contain 110% of maximum stored volume. All produced water will be disposed of via truck transport to the Murrays disposal, La Pointe, Utah. An "as built" drawing will be submitted with site security diagram.

E. All above ground permanent structures (permanent means on-site for longer than 90 days) not subject to safety requirements shall be painted Desert Tan.

5. LOCATION AND TYPE OF WATER SUPPLY

A. Location: Water will be supplied by Nebecker Trucking of Roosevelt, Utah. Water source Will be from their collection box set over an un-named natural spring located In the NE/4, Sec. 32, T6S-R20E @ 1320' FSL, 1320' FWL, under the water right Of Mr. Eugene Brown, permit # 43-9077.
B. Method of transportation: Water is to be hauled via truck by Nebecker Trucking.
C. Water well to be drilled: None.
D. Water Pipeline - None

6. SOURCE OF CONSTRUCTION MATERIALS

A. Location: Native materials obtained during construction.
B. From Federal or Indian lands: Indian lands.
C. Where materials will be used: On location and access road.
D. Access roads on Federal or Indian lands: Indian lands.

7. Methods of Handling Waste Disposal

All state and local laws and regulations pertaining to disposal of human and solid waste will be complied with.

A/B. Cuttings and drilling fluids: Cuttings and drilling fluids will be contained in the reserve pit.

C. Produced fluids: Tanks will be used for storage of produced fluids during testing. Fracture stimulation fluids will be flowed back into the reserve pit for evaporation.

D. Sewage: Sewage will be contained in above ground storage tanks (Exhibit D). All applicable permits will be secured prior to installation. Upon completion of the project, sewage will be hauled to an approved sewage treatment facility for disposal.

E. Burnable waste will be contained in a portable trash cage. This waste will be transported to a State approved waste disposal site upon completion of operations.

F. Proper clean up of well site: Upon completion of drilling, all trash and litter will be picked up and placed in the trash cage. The reserve pit will be fenced on 3 sides during drilling and the 4th side will be fenced when drilling is completed. The reserve pit will remain fenced until dry, at which time it will be backfilled to depth of at least 5 feet of soil material.

G. No chemicals subject to reporting under SARA Title III (hazardous material) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, of disposed of in association with the drilling of this well.

8. Ancillary Facilities: None

9. Wellsite Layout

A. Drill pad cross sections, cuts and fills (see Exhibits E).

B. Location of pits and stockpiles: See diagram (Exhibit D) for location of mud tanks, reserve pit, burn and trash pit, pipe racks, living facilities and soil material stockpiles.

C. Pad orientation: See rig layout diagram (Exhibit D) for rig orientation, parking areas and access roads.

D. O.S.H.A. requirements: Area needed to conduct the fracturing operations, if necessary, in a safe manner and in accordance with O.S.H.A. standards will be within the areas already disturbed or agreed upon at the presite examination.

E. Surface Runoff: In order to divert surface runoff, a drainage ditch will be constructed around the upslope side of the well site.

F. Construction activity will not be conducted using frozen or saturated soil material or during periods when watershed damage is likely to occur.

G. Confine all equipment and vehicles to the access road, pad and spoil and topsoil storage areas.

H. Strip eight inches of topsoil from the wellpad and spoil storage area prior to any other construction activity.

I. Compact the fill section of the pad that supports the drill rig and any other heavy equipment.

Flagging and Staking

Centerline road flagging: The proposed route of the new access road is flagged as shown on map (Exhibit B). Slope, grade and other control stakes will be placed as necessary to ensure construction in accordance with the road specifications. The cut and fill slopes and spoil storage areas will be marked with a stake as necessary. The tops of the stakes or laths shall be painted or flagged in a distinctive color. All boundary stakes and/or laths shall be maintained in place until final construction cleanup is completed. If stakes are disturbed, they shall be replaced before proceeding with construction.

Fences

Prior to the onset of drilling, a "stock tight" fence shall be installed on three sides of the reserve pit. This fence will be either (1) woven wire at least 28 inches high and within four inches of ground surface with two strands of barbed wire above the woven wire with 10-inch spacing, or (2) at least five strands of barbed wire spaced, starting from the ground, at approximately 6-, 8-, 10-, and 12-inch intervals. The fourth side of the reserve pit will be fenced after the drilling rig moves off the location.

Syphons

Install syphons, catchments, and absorbent pads to keep hydrocarbons produced by the drill rig from entering the reserve pit. Ensure that hydrocarbons and contaminated pads are disposed of in accordance with Utah DEQ requirements.

Reserve Pits

The reserve pit will be examined by the operator and the authorized officer after construction and prior to the addition of any fluids to determine if the materials are permeable and potentially capable of allowing transfer of pit contents to the groundwater. If permeable, supplemental pit lining will be required, such as bentonite clay or a membrane liner. The type of lining use will be mutually agreed to by the operator and the authorized officer.

Backfill reserve pit as soon as dry after drilling and completion operations are finished. If natural evaporation of the reserve pit is not feasible, alternative methods of drying, removal of fluids, or other treatment must be developed. If fluids will be disposed of by any method other than evaporation or hauling to a DEQ approved disposal pit, prior approval by the BLM is required. NOTE: If disposal involves proposed discharge or transport, Utah DEQ approval is necessary.

The reserve pit bottom and side walls shall be void of any sharp rocks that could puncture the liner.

If liner is required, then: Line the reserve pit prior to putting any fluids into it. The pit liner must have a mullen burst strength that is equal to or exceeds 300 pounds, a puncture strength that is equal to or exceeds 160 pounds, and grab tensile strengths that are equal to or exceeds 150 pounds. These are to be verified test results run according to ASTM test standards . In addition, the liner must be totally resistant to deterioration by hydrocarbons.

Liners must be installed over smooth fill subgrade which is free of pockets, loose rocks, or other materials which could damage the liner. Sand, sifted dirt, or bentonite are suggested.

Testing

If drilling fluids are transferred from this well to the next well in the drilling plan, then the fluids will be tested at the well logging stage of drilling operations using Utah DEQ Guideline parameters. This water analysis standard is incorporated in a packet submitted by Western Environmental Services and Testing Inc. as part of their water analysis packages. Any other company doing water testing will also have to test for the elements listed in the Utah DEQ Guideline parameters.

In order to ensure timely review of the water quality data, the operator is required to have a Utah DEQ approved firm contracted to conduct water samples, send a copy of water quality test results to the Vernal BLM office at the same time that they are sent to the operator.

10. Plans for Reclamation of the Surface

A. Rat and mouse holes shall be filled and compacted from bottom to top immediately upon release of the drilling rig from the location.

B. Spread topsoil from the berms and/or storage piles along the road's cut and fill slopes. Do not block drainage ditches or culverts with topsoil and associated organic matter. Seed the topsoiled areas as stated below.

C. Recontour the unused area of the pad, spread topsoil six inches deep, rip the area on the contour one ft. deep using ripper teeth set on one ft. centers. Seed the reclaimed area of the well pad and the access road cut and fill slopes as stated below.

Seeding

Seed mixture and application rates contained in the condition of approval will be applied. Seed all disturbed areas using a drill equipped with a depth regulator. All seed must be drilled on the contour. Plant the seed between one- quarter and one-half inches deep. Seed all disturbed areas using a drill equipped with a depth regulator. All seed must be drilled on the contour. Plant the seed between one-quarter and one-half inches deep. Where drilling is not possible (too steep or rocky), broadcast the seed and rake or chain the area to cover the seed. If the seed mixture is broadcast, double the rate listed below. The seeding shall be repeated until a satisfactory stand, as determined by the Authorized Officer, is obtained. The first evaluation of growth will be made following completion of the first growing season after seeding.

Pure live seed (PLS) formula: % of purity of seed mixture times % germination of seed mixture = portion of seed mixture that is PLS.

Seeding will take place after September 1 1998 and prior to ground frost.

11. LESSEE OR OPERATOR'S FIELD REPRESENTATIVE

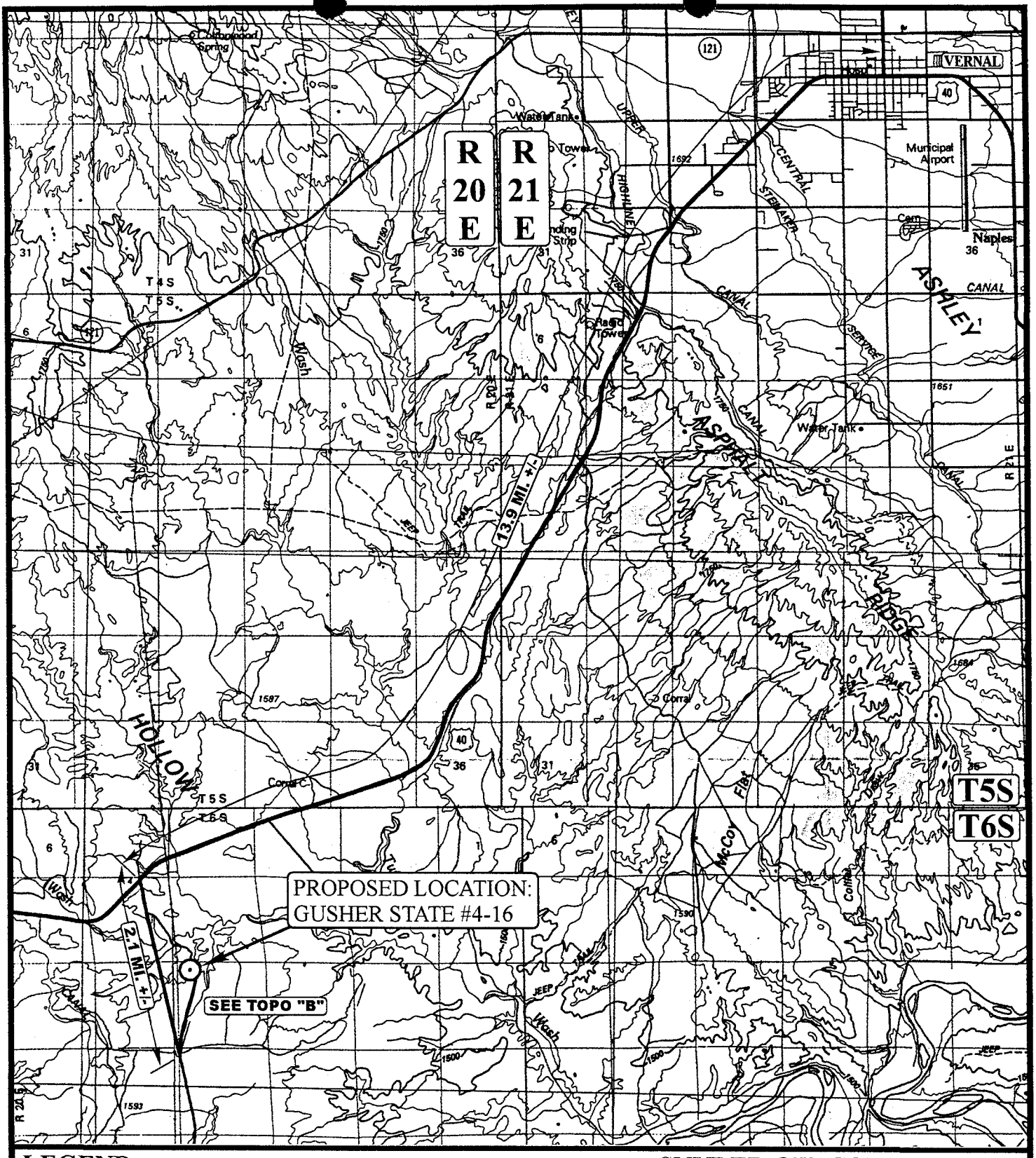
Operator
Joe Mazotti
Snyder Oil Corporation
1625 Broadway, Suite 2200
Denver, CO 80202
(303) 592-4643

12. CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Snyder Oil Company, and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

12/18/07
Date

Joe Mazotti, Sr. Regulatory Specialist
Snyder Oil Corporation



LEGEND:

⊙ PROPOSED LOCATION

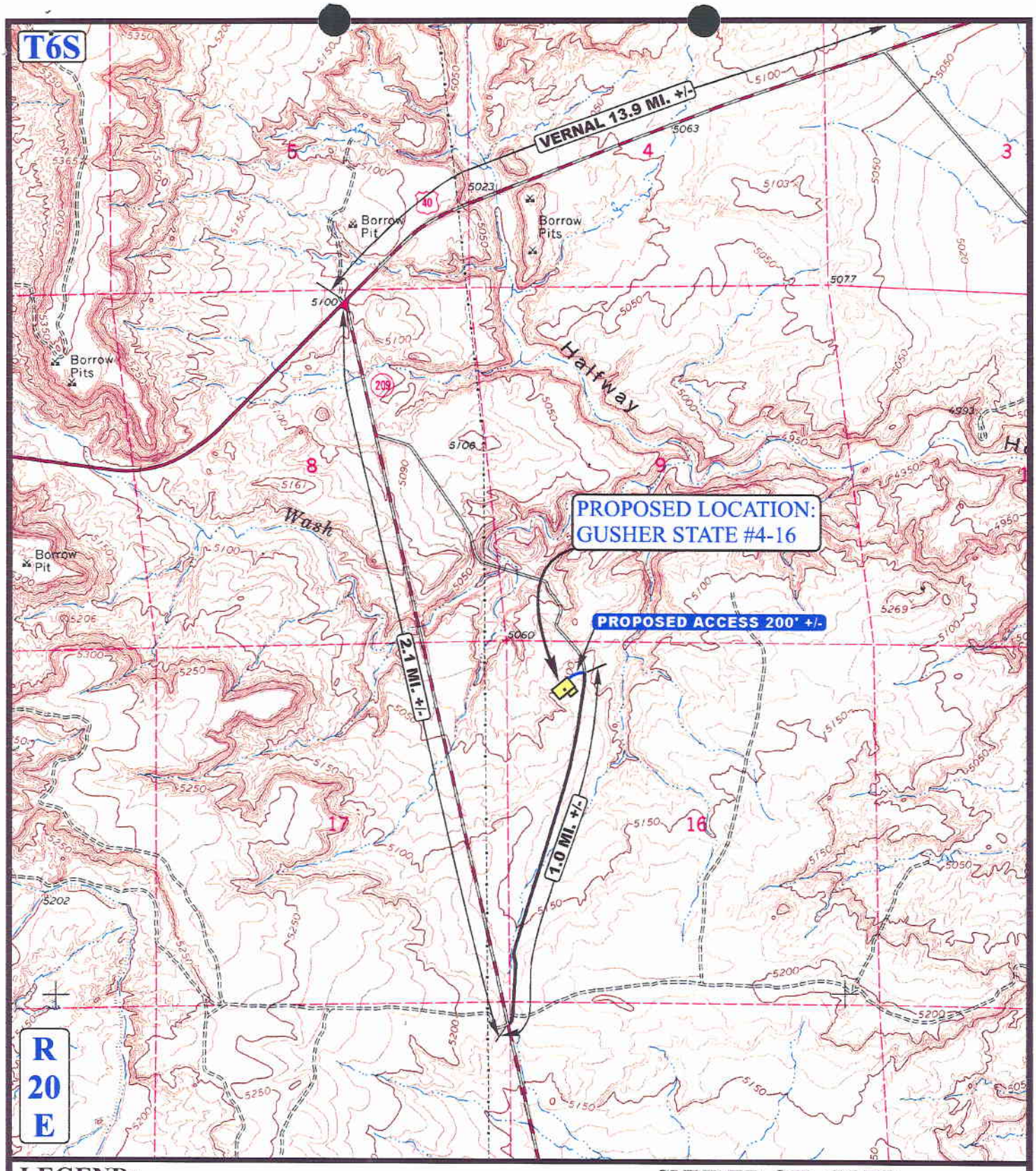
N

SNYDER OIL CORP.

GUSHER STATE #4-16
SECTION 16, T6S, R20E, S.L.B.&M.
698' FNL 859' FWL

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813
Email: uels@easilink.com

TOPOGRAPHIC MAP	11 MONTH	11 DAY	97 YEAR
SCALE: 1 : 100,000	DRAWN BY: J.L.G.	REVISED: 00-00-00	A TOPO



LEGEND:

PROPOSED ACCESS ROAD

EXISTING ROAD

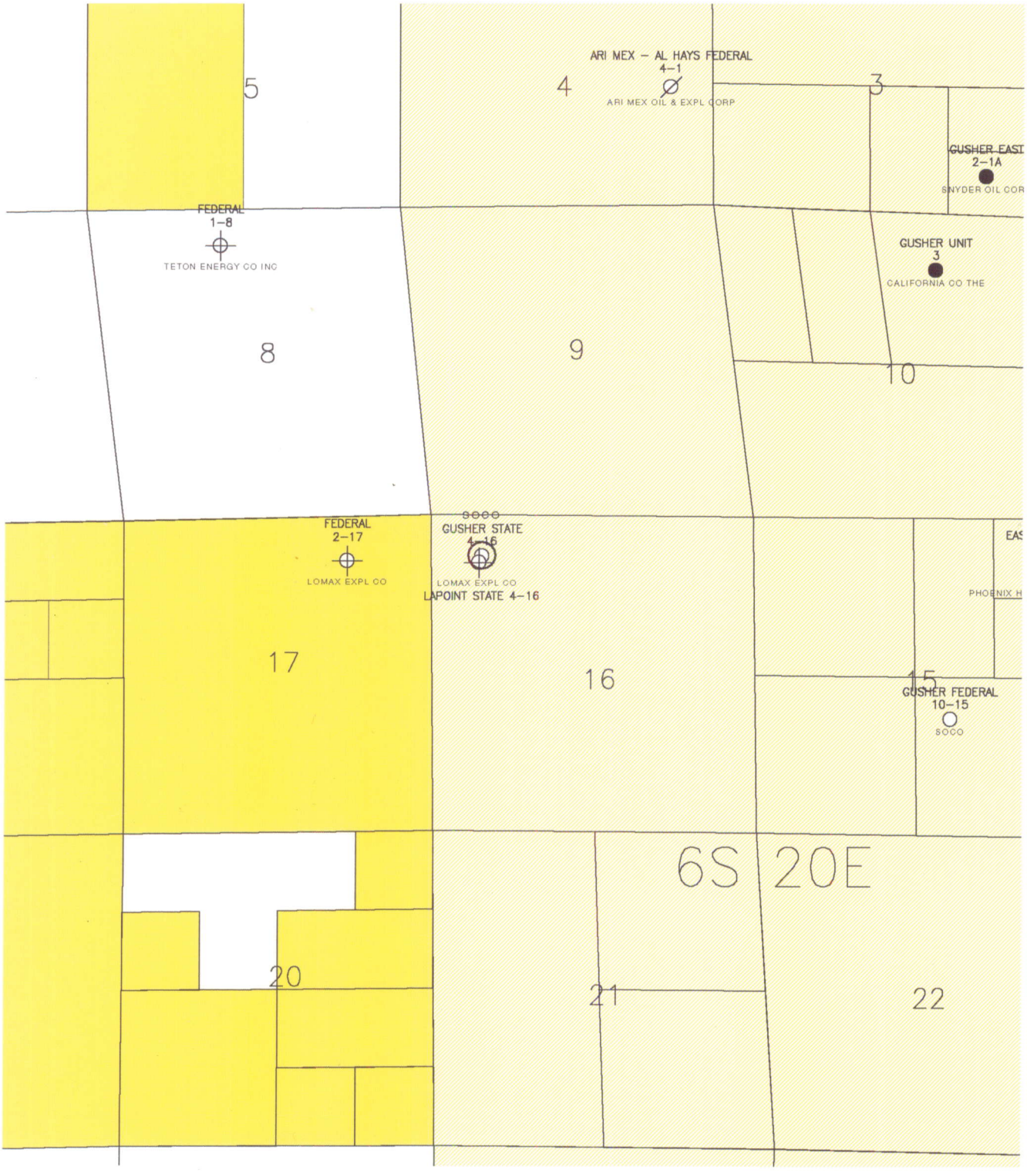
N

SNYDER OIL CORP.

GUSHER STATE #4-16
SECTION 16, T6S, R20E, S.L.B.&M.
698' FNL 859' FWL

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813
Email: uels@easilink.com

TOPOGRAPHIC MAP	11 MONTH	11 DAY	97 YEAR	B TOPO
SCALE: 1" = 2000'	DRAWN BY: J.L.G.	REVISED: 00-00-00		



SOCO

N

SNYDER OIL CORPORATION		
GUSHER STATE #4-16 Sec. 16 T6S-R20E		
Rod Guice	Scale 1" = 2,000'	12/16/97
Kim Mitchara		DSHBGUSH.gpf

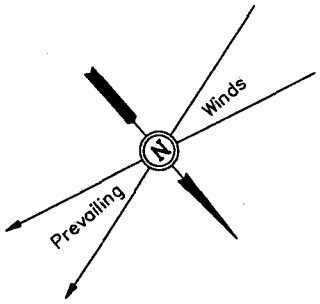
Exhibit C

SNYDER OIL CORP.

LOCATION LAYOUT FOR

GUSHER STATE #4-16
SECTION 16, T6S, R20E, S.L.B.&M.
698' FNL 859' FWL

Exhibit D



SCALE: 1" = 50'
DATE: 11-11-97
Drawn By: D.R.B.

C-6.4'
El. 113.2'

C-5.4'
El. 112.2'

Topsoil Stockpile

El. 106.3'
F-0.5'

Sta. 3+35

40'

DATA

Flare Pit
±6' Deep

10'

15'

BERM

DRY HOLE

175'

CATWALK

Reserve Pit Backfill
& Spoils Stockpile

NOTE:
FLARE PIT IS TO BE LOCATED A MINIMUM OF 100' FROM THE WELL HEAD.

El. 118.4'
C-21.6'
(Btm. Pit)

El. 111.8'
C-5.0'

PIPE RACKS

C-1.3'
El. 108.1'

L.O.C.

60'

20'

40'

RIG

DOG HOUSE

100'

Sta. 1+60

APPROX.
TOP OF
CUT SLOPE

RESERVE PIT
(10' Deep)

10' WIDE BENCH

170'

1 1/2:1 (TYP.)

PIT CAPACITY
WITH 2' OF
FREEBOARD
= 9,160 Bbls.

MUD TANKS

WATER

TRAILER

PUMP

MUD SHED

TOILET

HOPPER

FUEL

POWER

TOOLS

TRASH

COMPRESSORS

El. 97.0'
F-9.8'

APPROX.
TOE OF
FILL SLOPE

El. 114.4'
C-17.6'
(Btm. Pit)

Sta. 0+25

El. 113.8'
C-7.0'

STORAGE
TANK

160'

FUEL

Sta. 0+00

El. 105.7'
F-1.1'

C-7.7'
El. 114.5'

C-5.8'
El. 112.6'

Proposed Access
Road

Elev. Ungraded Ground at Location Stake = 5108.1'

Elev. Graded Ground at Location Stake = 5106.8'

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

REGISTERED LAND SURVEYOR
No. 161319
ROBERT L. KAY
STATE OF UTAH

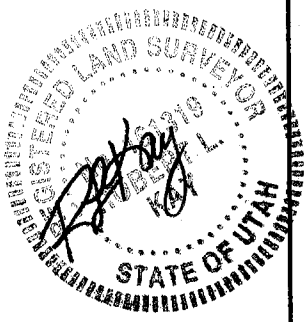
SNYDER OIL CORP.

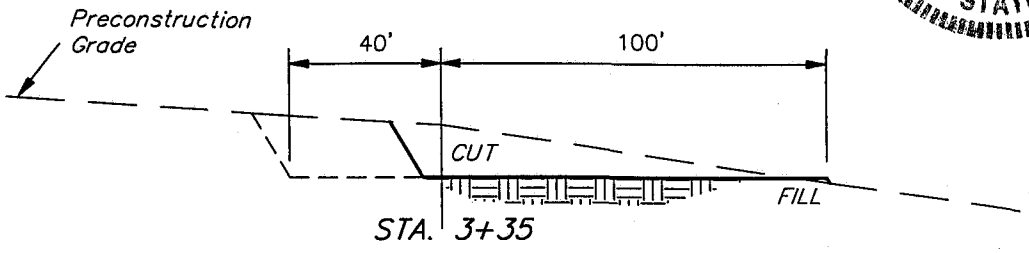
TYPICAL CROSS SECTIONS FOR

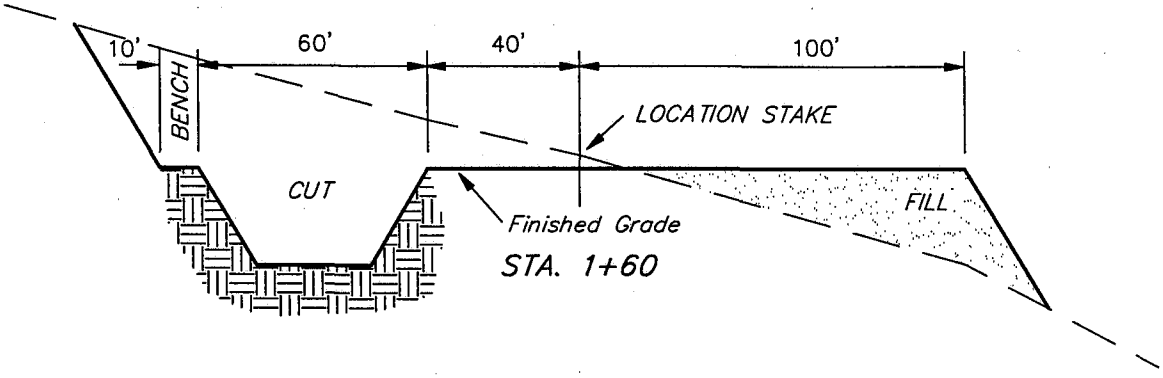
GUSHER STATE #4-16
SECTION 16, T6S, R20E, S.L.B.&M.
698' FNL 859' FWL

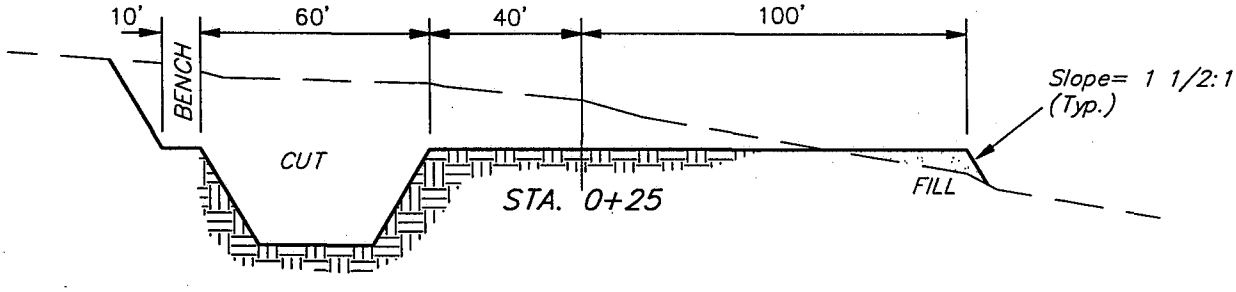
1" = 20'
X-Section Scale
1" = 50'

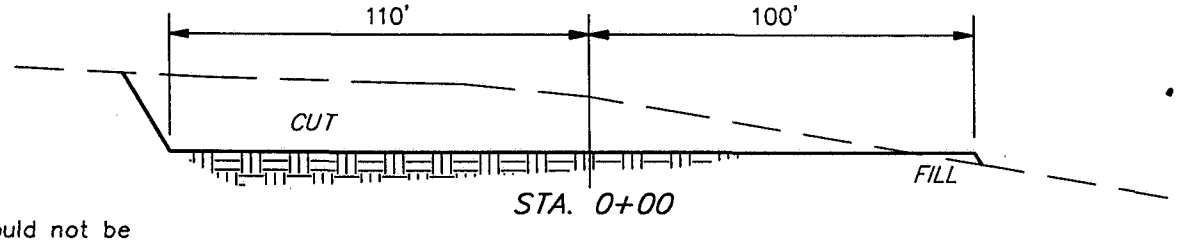
DATE: 11-11-97
Drawn By: D.R.B.











NOTE:
Topsoil should not be Stripped Below Finished Grade on Substructure Area.

Exhibit E

APPROXIMATE YARDAGES

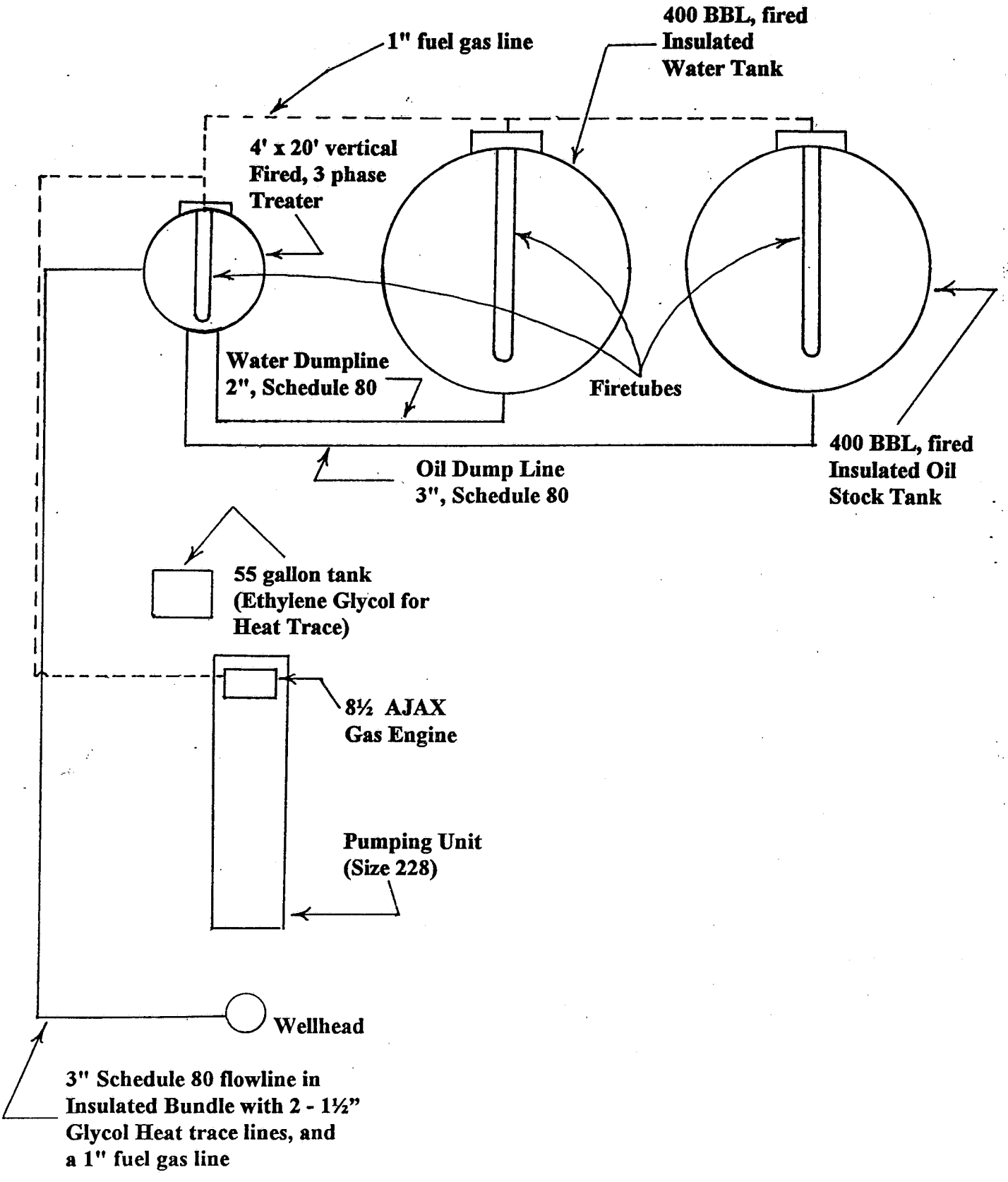
CUT

(6") Topsoil Stripping	=	1,060 Cu. Yds.
Remaining Location	=	9,820 Cu. Yds.
TOTAL CUT	=	10,880 CU.YDS.
FILL	=	3,550 CU.YDS.

EXCESS MATERIAL AFTER 5% COMPACTION	=	7,140 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	=	2,380 Cu. Yds.
EXCESS CUT MATERIAL	=	4,760 Cu. Yds.

UINTAH ENGINEERING & LAND SURVEYING
*85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017*

Exhibit F


1" fuel gas line
400 BBL, fired
Insulated
Water Tank
4' x 20' vertical
Fired, 3 phase
Treater
Water Dumpline
2", Schedule 80
Firetubes
400 BBL, fired
Insulated Oil
Stock Tank
Oil Dump Line
3", Schedule 80
55 gallon tank
(Ethylene Glycol for
Heat Trace)
8½ AJAX
Gas Engine
Pumping Unit
(Size 228)
Wellhead
3" Schedule 80 flowline in
Insulated Bundle with 2 - 1½"
Glycol Heat trace lines, and
a 1" fuel gas line

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 12/18/97

API NO. ASSIGNED: 43-047-33036

WELL NAME: GUSHER STATE 4-16
OPERATOR: SNYDER OIL CORPORATION (N1305)

PROPOSED LOCATION:
NWNW 16 - T06S - R20E W
SURFACE: 0698-FNL-0859-FEL
BOTTOM: 0698-FNL-0859-FEL W
UINTAH COUNTY
UNDESIGNATED FIELD (002)

LEASE TYPE: STA
LEASE NUMBER: ML - 46290

PROPOSED PRODUCING FORMATION: GRRV

INSPECT LOCATION BY: 01/15/98		
TECH REVIEW	Initials	Date
Engineering	JRB	2/2/98
Geology		
Surface		

RECEIVED AND/OR REVIEWED:

✓ Plat
✓ Bond: Federal[] State[✓] Fee[]
(Number 573 6975)
N Potash (Y/N)
N Oil shale (Y/N)
✓ Water permit
(Number 43-9077)
___ RDCC Review (Y/N)
(Date: _____)

LOCATION AND SITING:

___ R649-2-3. Unit: _____

✓ R649-3-2. General.

___ R649-3-3. Exception.

___ Drilling Unit.
Board Cause no: _____
Date: _____

COMMENTS: Casing OK, cementing OK, BOP OK.

STIPULATIONS: 1. Statement of Basis.

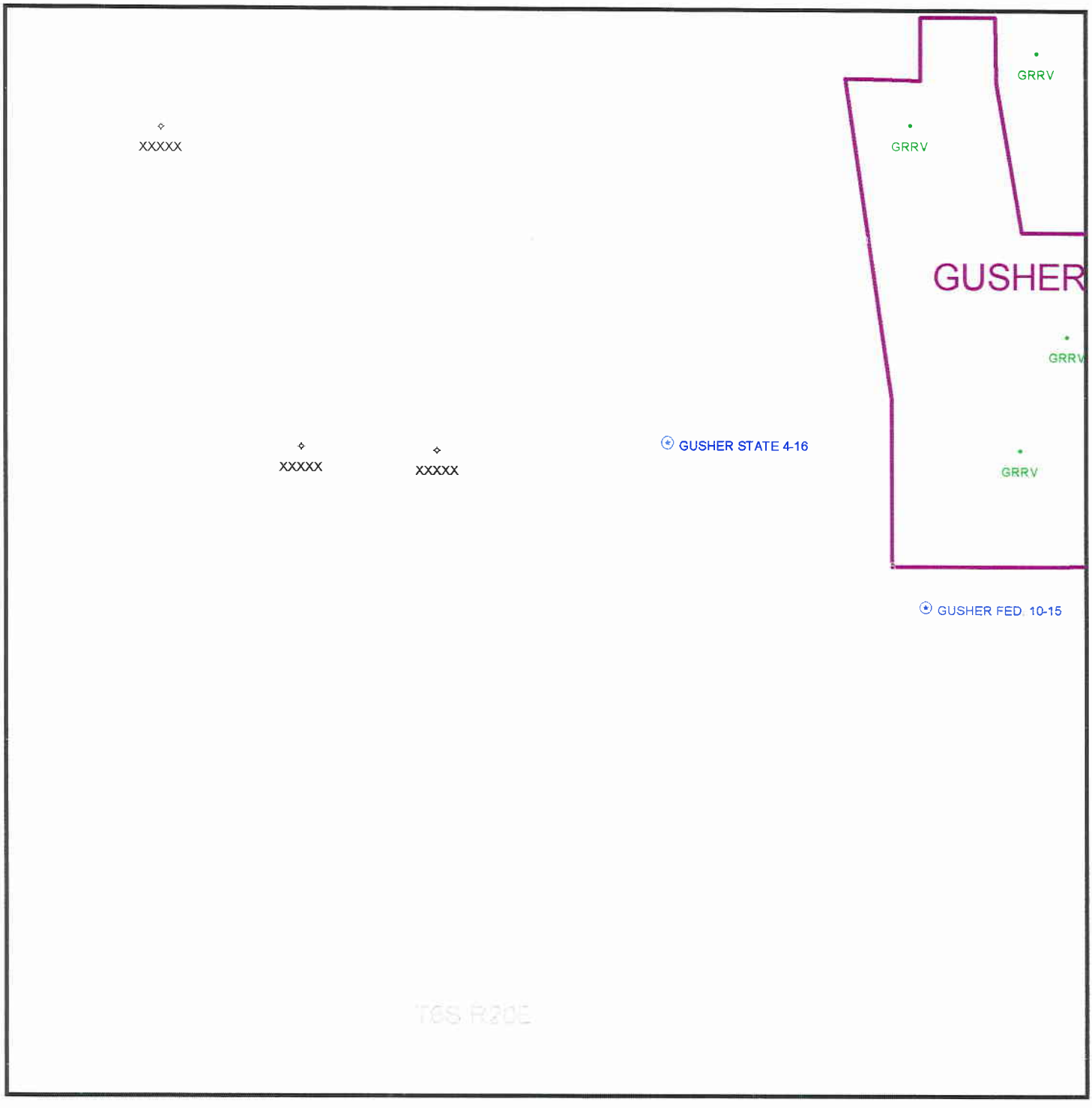
DIVISION OF OIL, GAS & MINING

OPERATOR: SNYDER OIL CORPORATION (N1305)

FIELD: WILDCAT (001)

SEC. TWP. RNG.: SEC. 16, T6S, R20E

COUNTY: UINTAH UAC. R649-3-2



DATE PREPARED:
23-DEC-1997

ON-SITE PREDRILL EVALUATION

Division of Oil, Gas and Mining

OPERATOR: SNYDER OIL CORPORATION
WELL NAME & NUMBER: GUSHER STATE 4-16
API NUMBER: 43-047-33036
LEASE: ML46290 FIELD/UNIT: EAST GUSHER
LOCATION: 1/4,1/4 NW/NW Sec: 16 TWP: 6S RNG: 20E 698' FNL 859' FWL
GPS COORD (UTM) NO READING
SURFACE OWNER: STATE INSTITUTIONAL TRUST LANDS ADMINISTRATION

PARTICIPANTS

BILL NYLAND, ROD GUICE (SNYDER): DAVID HACKFORD (D.O.G.M.)

REGIONAL/LOCAL SETTING & TOPOGRAPHY

SITE IS LOCATED ON AN ERODED BENCH WITH NEARBY BADLANDS AND GULLIES DRAINING TO HALFWAY HOLLOW LOCATED 1500' TO THE NORTH. THIS HOLLOW DRAINS TO THE EAST TOWARD THE GREEN RIVER.

SURFACE USE PLAN

CURRENT SURFACE USE: LIVESTOCK AND WILDLIFE GRAZING. HUNTING.

PROPOSED SURFACE DISTURBANCE: LOCATION WILL BE 335' X 200. ACCESS ROAD WILL BE 200 FEET.

LOCATION OF EXISTING WELLS WITHIN A 1 MILE RADIUS: SEE ATTACHED MAP FROM GIS DATABASE.

LOCATION OF PRODUCTION FACILITIES AND PIPELINES: ALL PRODUCTION FACILITIES WILL BE ON LOCATION AND ADDED AFTER DRILLING WELL.

SOURCE OF CONSTRUCTION MATERIAL: ALL CONSTRUCTION MATERIAL WILL BE BORROWED FROM THIS SITE DURING CONSTRUCTION AND IS NATIVE.

ANCILLARY FACILITIES: NONE WILL BE REQUIRED.

WASTE MANAGEMENT PLAN:

DRILLED CUTTINGS WILL BE SETTLED INTO RESERVE PIT. LIQUIDS FROM PIT WILL BE ALLOWED TO EVAPORATE. FORMATION WATER WILL BE CONFINED TO STORAGE TANKS. SEWAGE FACILITIES, STORAGE AND DISPOSAL WILL BE HANDLED BY COMMERCIAL CONTRACTOR. TRASH WILL BE CONTAINED IN TRASH BASKETS AND HAULED TO AN APPROVED LAND FILL.

ENVIRONMENTAL PARAMETERS

AFFECTED FLOODPLAINS AND/OR WETLANDS: NONE.

FLORA/FAUNA: SAGEBRUSH, GALLETA GRASS, GREASEWOOD, PRICKLY PEAR: PRONGHORN, RODENTS, COYOTES, BIRDS, RABBITS,

SOIL TYPE AND CHARACTERISTICS: LIGHT BROWN SANDY CLAY LOAM.

SURFACE FORMATION & CHARACTERISTICS: ROCKS EXPOSED NEARBY ARE PART OF THE BRENNAN BASIN MEMBER OF THE DUCHESNE RIVER FORMATION.

EROSION/SEDIMENTATION/STABILITY: MINOR EROSION, MINOR SEDIMENTATION, NO STABILITY PROBLEMS ANTICIPATED.

PALEONTOLOGICAL POTENTIAL: NONE OBSERVED.

RESERVE PIT

CHARACTERISTICS: 170' BY 50' AND 10' DEEP.

LINER REQUIREMENTS (Site Ranking Form attached): A LINER WILL NOT BE REQUIRED.

SURFACE RESTORATION/RECLAMATION PLAN

AS PER STATE LANDS.

SURFACE AGREEMENT: STATE TRUST LANDS.

CULTURAL RESOURCES/ARCHAEOLOGY: AN ARCHAEOLOGICAL INVESTIGATION HAS BEEN CONDUCTED BY JOHN SENULIS OF SENCO-PHENIX. A REPORT OF THIS INVESTIGATION WILL BE PLACED ON FILE.

OTHER OBSERVATIONS/COMMENTS

INVESTIGATION WAS DONE ON A COLD, SUNNY DAY WITH 5" SNOW COVER.

ATTACHMENTS:

PHOTOS OF PROPOSED SITE WILL BE PLACED ON FILE.

DAVID W. HACKFORD	1/8/98 11:00 AM
DOGM REPRESENTATIVE	DATE/TIME

Evaluation Ranking Criteria and Ranking Score
For Reserve and Onsite Pit Liner Requirements

Site-Specific Factors	Ranking	Site Ranking
Distance to Groundwater (feet)		
>200	0	
100 to 200	5	
75 to 100	10	
25 to 75	15	
<25 or recharge area	20	0
Distance to Surf. Water (feet)		
>1000	0	
300 to 1000	2	
200 to 300	10	
100 to 200	15	
< 100	20	10
Distance to Nearest Municipal Well (feet)		
>5280	0	
1320 to 5280	5	
500 to 1320	10	
<500	15	0
Distance to Other Wells (feet)		
>1320	0	
300 to 1320	10	
<300	20	0
Native Soil Type		
Low permeability	0	
Mod. permeability	10	
High permeability	20	0
Fluid Type		
Air/mist	0	
Fresh Water	5	
TDS >5000 and <10000	15	
TDS >10000 or Oil Base	20	
Mud Fluid containing high levels of hazardous constituents		5
Drill Cuttings		
Normal Rock	0	
Salt or detrimental	10	0
Annual Precipitation (inches)		
<10	0	
10 to 20	5	
>20	10	0
Affected Populations		
<10	0	
10 to 30	6	
30 to 50	8	
>50	10	0
Presence of Nearby Utility Conduits		
Not Present	0	
Unknown	10	
Present	15	0

Final Score 15

Michael O. Leavitt
Governor
Ted Stewart
Executive Director
Lowell P. Braxton
Division Director

State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
801-538-5340
801-359-3940 (Fax)
801-538-7223 (TDD)

February 3, 1998

Snyder Oil Corporation
1625 Broadway Ste 2200
Denver, CO 80202

Re: East Gusher, Gusher State 4-16, 698' FNL, 859' FWL, NW NW SEC. 16, T. 6 S., R. 20 E., Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-33036.

Sincerely,

John R. Baza
Associate Director

ls
Enclosures
cc: Uintah County Assessor
Bureau of Land Management, Vernal District Office

Operator: Snyder Oil Corporation

Well Name & Number: Gusher State 4-16

API Number: 43-047-33036

Lease: ML-46290

Location: NW NW **Sec.** 16 **T.** 6 S. **R.** 20 E.

Conditions of Approval

1. General
   Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

2. Notification Requirements
   Notify the Division within 24 hours following spudding the well or commencing drilling operations. Contact Jim Thompson at (801)538-5336.

   Notify the Division prior to commencing operations to plug and abandon the well. Contact John R. Baza (801)538-5334.

3. Reporting Requirements
   All required reports, forms and submittals shall be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis dated January 12, 1998(copy attached).

Michael O. Leavitt
Governor
Ted Stewart
Executive Director
Lowell P. Braxton
Division Director

State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
801-538-5340
801-359-3940 (Fax)
801-538-7223 (TDD)

March 12, 1999

Joe Mazotti
Snyder Oil Corporation
1625 Broadway, Suite 2200
Denver, Colorado 80202

Re: APD Rescinded -- Gusher State 4-16 Well, Sec. 16, T. 6S, R. 20E, Uintah County, Utah, API No. 43-047-33036

Dear Mr. Mazotti:

The Application for Permit to Drill for the subject well was approved by the Division of Oil, Gas and Mining on February 3, 1998. No drilling activity at this location has been reported to the division. Due to the excessive time delay in commencing drilling operations, approval to drill the well is hereby rescinded, effective immediately.

Please note that a new Application for Permit to Drill must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division of Oil, Gas and Mining immediately.

Sincerely,

Don Staley
Information Services Manager
Oil and Gas

cc: J.R. Baza
L.E. Cordova
Well File


GUSHER STATE # 4-16

Snyder Presite

Gusher State 4-16

43-047-33036

Looking West

Snyder Preside

Gosney State 4-16

43-047 33036

Looking East

Snyder Presite

Gosher State 4-16

43-047-33036

Looking South